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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,350	07/24/2003	Dennis Lewis	BAI525/03273	9118
24118	7590	04/01/2005	EXAMINER	
HEAD, JOHNSON & KACHIGIAN 228 W 17TH PLACE TULSA, OK 74119			BASICHAS, ALFRED	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.

10/626,350

Applicant(s)

LEWIS, DENNIS

Examiner

Alfred Basichas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Molodow (5,516,281), which shows all of the claimed limitations. Molodow shows a burner assembly including, among other things, combustion chamber 100, a premix chamber 120, and a burner plate 108 in the form of a perforated diffuser including a plurality of ports or groups of ports 112 provided at spaced locations therein in communication with the combustion chamber through which a pre-mixed gas/air mixture passes.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 2-6, 8, 12-14, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molodow (5,516,281) in view of Kleva (5,845,631). Molodow discloses substantially all of the claimed limitations, but does not specifically recite the intended use or the combination with a heat exchanger. Kleva teaches a burner assembly including, among other things, an air/fuel manifold 15 providing fuel to a plurality of burners 4, a plate 16 (see at least figs. 3,4) and a plurality of heat exchange tubes 6 aligned with the burners. While Kleva utilizes a plurality of burners, each with a single port, it would have been obvious to one of ordinary skill in the art to have substituted a single burner with a plurality of ports as the functional result is the same. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the heat exchanger of Kleva with the burner system disclosed by Molodow, because it is within the general skill of one of ordinary skill in the art to select a known structure on the basis of its suitability for the intended use.

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6. Claims 9-11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molodow (5,516,281) in view of Kleva (5,845,631), which combination discloses substantially all of the claimed limitations. Molodow in view of Kleva does not specifically recite the various embodiments recited in the claims, such as the number of burner ports differing from the number of inlets, greater or less than, various shapes of the ports, and fully or partially premixing. These various embodiments are clearly a matter of design choice, as all are old and well known in the art. Applicant has further indicated by omitting any detail to these embodiments that there is a lack of criticality thereto. In view of the absence of criticality or detail for these particular embodiments, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate it into the invention disclosed by the combination of Molodow and Kleva, so as to provide for desired known effects.

Response to Arguments

7. Applicant's arguments with respect to the claim have been considered but are moot in view of the new grounds of rejection.

a. In the remarks, applicant states that the disclosed invention is particularly advantageous since it provides a simple and cost-effective manifold/burner assembly that can provide combustion products to a number of heat exchange tubes via a burner plate. It should be noted that such an invention is already known, as shown by Molodow. Therefore, the use of this structure in an

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environment suitable for such a structure is not a novel or unobvious combination, and is well within the general skill of one of ordinary skill in the art.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272 4871. The examiner can normally be reached on Monday through Friday during regular business hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571 272 4877. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

March 28, 2005


Alfred Basicas
Primary Examiner